015E



RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/767,041

DATE: '02/05/2001 TIME: 14:01:05

19

Input Set : A:\sequence.txt

Output Set: N:\CRF3\02052001\1767041.raw

3 <110> APPLICANT: Smith, Hilda 5 <120> TITLE OF INVENTION: STREPTOCOCCUS SUIS VACCINES AND DIAGNOSTIC TESTS 7 <130> FILE REFERENCE: 2183-4726 C--> 9 <140 > CURRENT APPLICATION NUMBER: US/09/767,041 ENTERED see page 5 C--> 9 <141> CURRENT FILING DATE: 2001-01-22 9 <150> PRIOR APPLICATION NUMBER: PCT/NL99/00460 10 <151> PRIOR FILING DATE: 1999-07-19 12 <150> PRIOR APPLICATION NUMBER: EP98202465.5 13 <151> PRIOR FILING DATE: 1998-07-22 15 <150> PRTOR APPLICATION NUMBER: EP98202467.1 16 <151> PRIOR FILING DATE: 1998-07-22 18 <160> NUMBER OF SEQ ID NOS: 53 20 <170> SOFTWARE: PatentIn version 3.0 22 <210> SEQ ID NO: 1 23 <211> LENGTH: 23 24 <212> TYPE: DNA 25 <213> ORGANISM: Artificial 27 <220> FEATURE: 28 <223> OTHER INFORMATION: Primer 30 <400> SEQUENCE: 1 23 31 caaacgcaag gaattacggt atc 34 <210> SEQ ID NO: 2 35 <211> LENGTH: 23 36 <212> TYPE: DNA 37 <213> ORGANISM: Artificial 39 <220> FEATURE: 40 <223> OTHER INFORMATION: primer 42 <400> SEQUENCE: 2 43 gagtatetaa agaatgeeta ttg 23 46 <210> SEQ ID NO: 3 47 <211> LENGTH: 20 48 <212> TYPE: DNA 49 <213> ORGANISM: Artificial 5.1 <220> FEATURE: 52 <223> OTHER INFORMATION: primer 54 <400> SEQUENCE: 3 55 ggcggtctag cagatgctcg 20 58 <210> SEQ TD NO: 4 59 <211> LENGTH: 19 60 <212> TYPE: DNA 61 <213> ORGANISM: Artificial 63 <220> FEATURE:

64 <223> OTHER INFORMATION: primer

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70 <210> SEQ ID NO: 5 71 <211> LENGTH: 21 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/767,041 DATE: 02/05/2001 TIME: 14:01:05

Input Set : A:\sequence.txt
Output Set: N:\CRF3\02052001\1767041.raw

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73 <213> ORGANISM: Artificial							
75 <220> FEATURE:							
76 <223> OTHER INFORMATION: primer							
78 <400> SEQUENCE: 5							
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84 <212> TYPE: DNA							
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87 <220> FEATURE:							
88 <223> OTHER INFORMATION: primer							
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96 <212> TYPE: DNA							
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109 <213> ORGANISM: Artificial							
111 <220> FEATURE:							
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1.14 <400> SEQUENCE: 8							
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132 caagtcatat accaaatget gatttaaate gttetggaat ttttatcata atgatggtte	1.80						
134 attattttgc attitttata totogtatgo cagitigaatt tgagtataga ggtaatotga 136 tagagittga aawaacatti aactatagia taatattigo aattittott aoggoagiat	240						
	300						
138 cattitigit ggagaataat ticgcactit caagacgigg tgccgigtat ticacattaa 140 taaacticgi titggiatac ciattiaacg taattataa gcagittaag gatagciitc	360						
140 taatettegac aatetateaa aaaaagaega ttetaattae aaeggetgaa egatgggaaa	420						
142 tatiticgae datetateda dadaagaega ticidattae daeggetydd egatyggdad 144 ataigcaagi titaitigaa teacataaae aaatteaaaa daatetigii geatiggiag	480						
144 atatycaayt titatiigaa toacataaac aaattoaaa aaattiyti yoatiyytay 146 tittaggtac agaaatagat aaaattaatt tatcattacc getetattat tetgtggaag	540						
148 aagetataga gtttteaaca agggaagtgg tegaceaegt etttataaat etaceaagtg	600						
140 dayocacaya yoccocada ayyyaaytyy toyaccacyt ottiatadat ciaccadgig	000						

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PATENT APPLICATION: US/09/767,041

DATE: 02/05/2001 TIME: 14:01:05

Input Set : A:\sequence.txt
Output Set: N:\CRF3\02052001\1767041.raw

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			tttactgcgt				720
			tccacaaatt				780
	-	-	geggtagteg	_	-		840
			agagatggtg				900
		-	acattetaca				960
		-	agccaaaacc				1020
			ctccaattqq				1080
		-	gttttaattg		•		1140
	-	-	aaatatactc			-	1200
		-	caggttagtg	• •		-	1260
		,,,	tacattgata			, , ,	1320
			gtattqttqa				1380
	••		qqqqqacatt				1440
			tgggtaacat				1500
			tgttactttc	-		-	1560
	.,		aaaattttac				1620
			cecttettt				1680
			cgagttaata				1740
	-		qttcaqtqqq			-	1800
			taatgatitt				1860
			ttgatttatt				1920
			ctgactatat	-			1980
			aatatattaa	-			2040
	-		cattatccaa	-			2100
	-		taaatgatca		_	•	21.60
	-		_			•	2220
	-		tagaaaatat catcaaataa		-		2280
	_		atcaaqaaaa				2340
			-	•		-	2400
			cagattttac tagttccttc		-		2460
	20.00	,	-	-			2520
			ttacaaaaga gattatttcc			W. 1-	2580
	, , ,		-		•		2640
			gaatgtatcg acatggtcta	-			2700
	-	-	acatggteta	_			2760
		, , , ,		•			2820
	-		tgaactattt tggaaattta	-	-	-	2880
				•			2940
			tgattctatt aaaaatagaa				3000
	-	• •	-		_		3060
			ttgtgagagt			_	3120
		•	tacttctggt	-		., .	3120
		-	aatttaattt		-	-	
			ttattgtttt		_	-	3240
			gaaataaatt			-	3300
	-		ataatgtatt	-		-	3360
		-	atctttttta	-		-	3420
	-		aaagatattg	-	•		3480
246	actatettat	aacaggcgtc	aaaacaaggt	rggrrggert	Lacgaactat	cccacgttaa	3540

RAW SEQUENCE LISTING DATE: 02/05/2001 PATENT APPLICATION: US/09/767,041 TIME: 14:01:05

Input Set : A:\sequence.txt

Output Set: N:\CRF3\02052001\1767041.raw

				taatctttgc			3600
			-	taccgatcta			3660
				gcttgttatg			3720
254	ttgcttggat	aaaaaagcta	atagtaatat	ttgtaatact	acttattatt	ttaaatactg	3780
256	aattgcttta	ccatgaaatt	ttygctgttt	ataattctag	agaatcaagt	aacgaagcta	3840
258	gatttattat	ttatcaagga	agtattgata	aagtattaga	aaacaatatt	ttatttggat	3900
260	atggaatatc	cgaatattca	gttacgggaa	cttggctcgg	aagtcattca	ggctatatat	3960
262	cattttttta	taaatcagga	atagttyggt	tgattttact	gatgttttct	tttttttatg	4020
264	ttataaaaaa	aagttatgga	gttaatgggg	aaacagcact	attttattt	acatcattag	4080
266	ccatatttt	catatatgaa	acaatagatc	cgattattat	tatattagta	ctattcttt	4140
268	cttcaatagg	tatttggaat	aatataaatt	ttaaaaagga	tatygagaca	aaaaatgaat	4200
270	gatttaattt	cagttattgt	accaatttat	aatgtecaag	attatettga	taaatgtatt	4260
272	aacagtatta	ttaaccaaac	atatactaat	ttagaggtta	ttctcgtaaa	tgatggaagt	4320
274	actgatgatt	ctgagaaaat	ttgcttaaac	tatatgaaga	acgatggaag	aattaaatat	4380
276	tacaagaaaa	ttaatggcgg	tetageagat	gctcgaaatt	teggaetaga	acatgcaaca	4440
278	ggtaaatata	ttgcttttgt	cgattctgat	gactatatag	aagttgcaat	gttcgagaga	4500
280	atgcatgata	atataactga	gtataatgcc	gatatagcag	agatagattt	ttgtttagta	4560
282	gacqaaaacq	ggtatacaaa	qaaaaaaqa	aataqtaatt	ttcatqtctt	aacgagagaa	4620
284	gagactgtaa	aagaatttt	gtcaggatct	aatatagaaa	ataatgtttg	gtgcaagett	4680
286	tattcacqaq	atattataaa	agatataaaa	ttccaaatta	ataatagaag	tattggtgag	4740
288	gatttgcttt	ttaatttqqa	ggtettgaac	aatgtaacac	gtgtagtagt	tgatactaga	4800
				agttcgctta		-	4860
	-	-	-	aattacccct	-		4920
	-	-		gagaaggtta	-		4980
			•	ccaatattag	•	-	5040
	_			tatttatcaa	-	_	5100
	, ,			gtaatgttat			5160
		•		ttgttccagt	_		5220
				aaaattataa	-	•	5280
	, , ,			aaatatqcaa	-		5340
		2 -	_	gtggagtatc	-		5400
				ttqttqactc			5460
	2 , 2 3			taaaaaqtaq			5520
				attttqaaqt			5580
	-	••		qaqaaaaaaa	-	-	5640
				tatataagaa	-	-	5700
				tactttttaa	-	•	5760
				tttattttta		•	5820
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	-	-		attitgacgt	-		5940
	-	-		taatgtttaa	-	•	6000
		-	•	ataaaaaata		-	6060
	-		•	tttgtataag			6120
		-		atatcatgga		-	6180
					-		6240
				atttatctaa			6300
				tggtgaatga			6360
				atagtcgcat	•		6420
				gcataagtcg			6480
344	cittataga	cicayatgat	LLLaticatt	cggagttcat	ccaacgitta	cacgaagcaa	0480

DATE: 02/05/2001 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/767,041 TIME: 14:01:05

Input Set : A:\sequence.txt Output Set: N:\CRF3\02052001\1767041.raw

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346 ttgagagaga gaatgeeett gtggcagttg etggttatga tagggtagat gettegggge
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348 attictions agragaged effections atcaggetgt tetgagegge aggrantgilt
350 qtaaaaagct gctagaggeg qatqgtcatc qctttgtggt ggcctgtaat aaactctata
                                                                     6660
352 aaaaagaact atttgaagat tttcgatttg aaaagggtaa gattcatgaa gatgaatact
                                                                     6720
354 teacttateg ettgetetat gagttagawa aagttgeaat agttaaggag tgettgtaet
356 attatgttga ccgagaaaat agtatcacaa cttctagcat gactgaccat cgcttccatt
                                                                     6840
358 goctactgga atttcaaaat qaacgaatgg acttctatga aagtagagga gataaagagc
                                                                     6900
360 tettaetaga gtgttategt teattittag cetttgetgt tittgttitta ggcaaatata
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362 atcattggtt gagcaaacag caaaagaagc tt
365 <210> SEO ID NO: 10
366 <211> LENGTH: 239
367 <212> TYPE: PRT
368 <213> ORGANISM: Streptococcus suis
370 <220> FEATURE:
371 <221> NAME/KEY: misc_feature
372 <223> OTHER INFORMATION: ORF2Z
375 <400> SEQUENCE: 10
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380 Ala Ala Gly Ser Ala Cys Pro Ser Pro Gin Ala Tyr Gin Ala Ala Phe
381 20 25 30
383 Glu Gly Ala Glu Asn Ile Ile Val Val Thr Ile Thr Gly Gly Leu Ser 384 \phantom{+}35\phantom{+}40\phantom{+}45\phantom{+}
386 Gly Ser Phe Asn Ala Ala Arg Val Ala Arg Asp Met Tyr Ile Glu Glu
387 50 55
389 His Pro Asn Val Asn Ile His Leu Ile Asp Ser Leu Ser Ala Ser Gly
390 65 70 75
392 Glu Met Asp Leu Leu Val His Gln Tle Asn Arg Leu Ile Ser Ala Gl\gamma
              85
                                  90
395 Leu Asp Phe Pro Gln Val Val Glu Ala 1le Thr His Tyr Arg Glu His 396 100 105 110
401 Gly Arg Leu Ser Lys Leu Val Gly Thr Val Val Gly Leu Leu Asn Ile
402 130 135 140
407 Lys Ala Arg Gly His Lys Lys Ser Val Thr Ala Ala Phe Glu Glu Met
408 165 170 175
                  1.65
                                  170
410 Lys Lys Ala Gly Tyr Asp Gly Gly Arg Ile Val Met Ala His Arg Asn 411 180 185 190
413 Asn Ala Lys Phe Phe Gln Gln Phe Ser Glu Leu Val Lys Ala Ser Phe
414 195 200 205
416 Pro Thr Ala Val Ile Asp Glu Val Ala Thr Ser Gly Leu Cys Ser Phe 417 210 215 220
419 Tyr Ala Glu Glu Gly Leu Leu Met Gly Tyr Glu Val Lys Ala 420 225 230 235
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422 <210> SEQ ID NO: 11
423 <211> LENGTH: 244
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## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

DATE: 02/05/2001 VERIFICATION SUMMARY PATENT APPLICATION: US/09/767,041 TIME: 14:01:06

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Input Set : A:\sequence.txt

Output Set: N:\CRF3\02052001\1767041.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:3440 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48
L:3462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49
L:3553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52
L:3556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52